Department of Toxic Substances Control

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COMMENTS ON THE DRAFT FINAL REMEDIAL ACTION REPORT FOR SOLID WASTE MANAGEMENT UNITS (SWMU), 6 AND 20 SMALL EXCAVATION SITES, AND SWMU 4 WET SEASON CONTROLS, TRACY SITE, TRACY CALIFORNIA

Dear Mr. Cloud:

The Department of Toxic Substances Control (DTSC), received the above-mentioned report on June 15, 2004. The report discusses the implementation of the Record of Decision (ROD), selected remedies for SWMUs 4, 6, & 20. DTSC will focus its comments on SWMUs 6 & 20 since it has already provided comments for SWMU 4 in a letter dated November 19, 2003 for the Amendment to the Comprehensive ROD.

**SWMU 6**

SWMU 6 is the former location of a 250-gallon concrete sump that was built in 1968 after the completion of Building 28. The sump was used to dispose of waste materials from damaged containers. The sump was filled with sand in 1977 and was removed in 1988.

In 1988, the sand inside the sump was analyzed and concentrations of Trichloroethene (TCE), tetrachloroethene, 1,2-dichlorobenzene, 1,1,1-trichloroethene, lindane, dichlorodiphenyltrichloroethane, heptachlor, malathion, trichlorophenoxyacetic acid, total petroleum hydrocarbons, and xylenes were detected. During the Remedial Investigation (RI) in 1996, both pesticide and herbicide contamination was detected in soil beneath the excavation down to the water table. Excavation at SWMU 6 began in 1999 with the proposed excavation footprint of 10 feet (ft) by 15 ft to a depth of 18 ft, as specified in the ROD. Following the excavation, a total of six soil confirmation samples were collected from all the sidewalls and two from the bottom of the excavation. These samples were analyzed for contaminants of concern (COCs) listed in the ROD. Three

of the six confirmation samples showed exceedences of the cleanup standards for lindane detected at 2 micrograms per kilogram (µg/kg), 2,4,5-T was detected at 16 µg/kg, and dieldrin at 160 µg/kg. Based on these initial sampling results additional soil was removed from the northern and southern sidewalls of the excavation. Additional excavation was not completed on the western sidewall because a 4 ft diameter storm drain (SD) limited access. The final round of confirmation step-out sampling showed residual contamination remaining in both the eastern and western sidewalls due to residual contaminants underneath both the Building 28's foundation and immediately next to the 4 ft diameter SD. Specifically, the highest remaining concentrations detected at SWMU 6 were dieldrin at 160 µg/kg found at 10 ft below ground surface (bgs), lindane - 4 µg/kg at 10' bgs and 2,4,5-T - 12J µg/kg at 10' bgs.

The residual concentrations of dieldrin, lindane, and 2,4,5-T detected at SWMU 6 above the ROD cleanup standards, were modeled with VLEACH and SESOIL to determine if any potential impacts from SWMU 6 exist for underlying ground water. Deionized Water (DI) tests and vadose zone transport modeling for 2,4,5-T, dieldrin and lindane indicated that residual concentrations left in place will not adversely impact the water quality goals. The modeling results indicated that the ROD cleanup goals were overly conservative supporting a revision of the cleanup goals for 2,4,5-T and lindane from 5 µg/kg to 13 µg/kg and 1.7 µg/kg to 5 µg/kg, respectively. For reference, the United States Environmental Protection Agency's Industrial Preliminary Remediation Goals (PRG) for Regional 9 soil for 2,4,5-T and lindane are 6.2E+06 µg/kg and 1.7E+03 µg/kg, respectively. Dieldrin was the only COC at SWMU 6 that exists above the Region 9 Industrial PRG of 110 µg/kg with a detection of 160 µg/kg.

In May 2002, a supplemental investigation was conducted at SWMU 6 to determine the extent of residual contaminants in a discrete area west of Building 28 and immediately to the east of the 4 ft SD line. The close proximity of Building 28 and the SD prohibited the excavation of soil from these specific locations in the previous two rounds. The supplemental sampling collected samples from three depths at four locations, two east of the storm drain and two in a small area west of Building 28. The Direct Push technology also collected grab ground water samples from each boring along with one additional down gradient grab ground water sample to assess whether the COCs had leached from the soil and were migrating with ground water. The analytical results from all the supplemental soil and ground water samples showed concentrations below ROD-specified soil cleanup standards and ROD-specified ground water beneficial use limits.

The residual concentration of dieldrin left in place above the industrial PRG prompted the regulatory team to request Land Use Controls (LUCs) to protect construction workers at SWMU 6. The LUCs are documented in the DDJC-Tracy Final Explanation

of Significant Differences (ESD) in section 2.0 and include: reference in the Installation Master Plan for land use changes or construction activities, notification procedures for regulatory agencies, annual review and maintenance of the controls, notification of regulatory agencies of any deficiencies in the controls, and following defined United States Army procedures for a change in land use.

Existing LUCs, future industrial use of the site, and ongoing ground water monitoring, will ensure the long-term effectiveness of the remedy and will protect human health and environment well into the future.

**SWMU 20**

SWMU 20 is the location of a former 500-gallon aboveground storage tank (AST) which contained waste solvents from Building 10. This AST was removed prior to April 1992. The SWMU 20 site also included a 2,000 gallon underground storage tank (UST) #13, containing No. 2 fuel oil and was removed in 1987. The UST site is being regulated under the Tri-Regional Guidance by the Regional Water Quality Control Board.

The remedial actions at SWMU 20 included soil excavation and confirmation sampling completed in two phases. The first phase occurred in 1998 when approximately 27 cubic yards of soil was removed around existing maintenance sumps and manhole cover. The soil confirmation samples showed concentrations of TPH-d, dieldrin, trichloroethene and ethylbenzene that exceeded the ROD cleanup standards.

In June 1999, a second phase of excavation took place at SWMU 20 when an additional 305 cubic yards were excavated, resulting in a total of 332 cubic yards removed from SWMU 20. The total soil excavated exceeded the ROD estimate of 10 cubic yards. Confirmation samples taken with Cone Penetrometer ® Testing (CPT) samples taken at 14 feet bgs on the southern boundary of the excavation showed residual concentrations of TPH-d at 48 mg/kg, thus exceeding the ROD cleanup level of 10 mg/kg. DI tests determined that the remaining TPH-d was not a threat to the ground water quality goals.

Residual TCE contamination currently exists directly beneath Building 10 due to the consistent detections of TCE in Extraction Well EW-011 at levels ranging from 1.3 µg/L during third quarter 2002 and 3.2 µg/L in third quarter 2003. Fortunately, three monitoring wells both down gradient and cross gradient from the site, have shown non-detects for TCE during the same reporting period. Additional fieldwork for SWMU 20 was conducted by the URS Corporation on April 12, 2004. The fieldwork involved an additional two CPT punches at discrete depth intervals both adjacent to the former UST excavation area and previous soil borings conducted during the RI. The 2004 fieldwork

detected TCE in soil gas at 4 feet bgs to 8 feet bgs with concentrations ranging from 14 parts per billion volume (ppbv) to 24 ppbv, significantly less than the 350 ppbv cleanup standard specified in the ROD. The presence of residual contaminants in soil above the ROD cleanup level for TPH-d and detections of TCE in EW-011 prompted the regulatory team to recommend Institutional Controls for SWMU 20.

Institutional Controls for SWMU 20, are identical to those listed above for SWMU 6 and are specified in section 2.0 of the Final ESD to the Sitewide Comprehensive ROD. The existing LUCs, future industrial use of the site, and ongoing ground water monitoring/treatment will ensure the long-term effectiveness of the remedy and will protect human health and environment well into the future.

**Erata**

1.) Page 1-2, section 1.3.1, second paragraph, first sentence: Please correct the misspelling of "sump."
2.) Table 10-1, Regional Water Quality Control Board Contact: Please list the new phone number for Mr. Marcus Pierce as (916) 464-4733.

**Conclusion**

DTSC concurs with the determinations presented in the Draft Final Remedial Action Report for SWMU 6 and 20 Small Excavation Sites, and SWMU 4 Wet Season Controls.

If you have any questions or comments regarding this letter, please feel free to contact the Project Manager, Mr. Peter MacNicholl at (916) 255-3713 or e-mail pmacnich@dtsc.ca.gov.

Sincerely,

Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities

cc: See next page.